TAPERS TO $\frac{3}{8}$ X $1\frac{1}{2}$ SECTION AT TIP (TYP BOTH SPARS)

CONSTANT SECTION $1\frac{1}{2}$ X $1\frac{1}{2}$

$\frac{3}{4}$ $\frac{7}{8}$ $\frac{7}{8}$

$\frac{7}{32}$ DIA. 3 HOLES THRU (TOTAL 6 HOLES EACH STRAP)

$\frac{7}{8}$ $9\frac{1}{2}$

35.0 57.5 90.0

POSITION OF HOLE TO BE FOLLOWED EACH WAY

120 106.5 93.0 79.5 66.0 52.5 39.0 25.5 12.0 B.L. 0

℄ SYMMETRY

LEADING EDGE WIRE CONTINUOUS

D C B A A A A A A

WIRE SAGS DUE TO TENSION IN FABRIC

PLAN VIEW OF WING

$\frac{1}{16}$ SCALE

LEFT HALF FRAME ONLY SHOWN, RIGHT HALF FABRIC COVERING SHOWN

B B

A A

WINGS RIB

GLUE & BIND EYE IN PLACE ON BOTH SIDES OF EACH RIB.

EYE

.75

.25 INSIDE DIA.

.50

DETAIL OF WIRE FAIRLEAD EYE

3/8 SCALE

POSITION OF FRONT SPAR

℄ SPAR

D

B

A

2.4

5.6

11.0

55.0

FABRIC WING COVERING

STITCHING

WIRE

SECTION B-B

FULL SIZE

FABRIC LEADING EDGE & TRAILING EDGE

$2\frac{3}{8}$ WIDE FABRIC STRIP

FABRIC WING COVERING

WING RIB

STITCHING

SECTION A-A

FULL SIZE

FULL SIZE LAYOUT OF WING RIBS "A" CUT AS SHOWN FOR RIBS B, C & D.

RIB	NO. REQD.
A	12
B	2
C	2
D	2

WING CONSTRUCTION SEQUENCE

1. BUILD TWO (2) SPARS 1½ X 1⅜ X 20 FT. LONG.
2. CUT STRIPS ¼ X $\frac{3}{32}$ FOR WING RIBS.
3. GLUE STRIPS TOGETHER IN JIG FOR SHAPE SHOWN.
4. CUT SHAPED RIBS TO PROPER LENGTH; INSTALL EYES FOR WIRES.
5. SEW RIB SHEATH STRIPS TO WING FABRIC.
6. INSERT RIBS IN SHEATHS.
7. NAIL & GLUE RIBS TO SPARS.
8. INSTALL WIRE LEADING & TRAILING EDGES.
9. HEM WING FABRIC OVER WIRES.
10. SHRINK FABRIC.
11. SHELLAC FABRIC (DOUBLE)

POSITION OF REAR SPAR

℄ SPAR

6. CEMENT TRAILING EDGES TO RIBS
5. WIRE TRAILING EDGES TO RIBS WITH #24 COPPER WIRE
4. CEMENT RIBS TO SPARS

D C A

8.75 8.75 15.75

MONTGOMERY 1883 GLIDER

WING — DOWNLOAD PLANS & DETAILS FULL SIZE TEMPLATES

PREPARED BY:

Jim Dakin Sonora, member of the Hofstra University Aviation Club

DRAWN BY Richard A. Sanders	DATE 10-20-61
CHECKED BY	
APPROVED BY	
DATE	